
Two New Combinations in *Maianthemum* (Convallariaceae)

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ABSTRACT. During preparation of the account of *Maianthemum* F. H. Wiggers for the *Flora of China*, volume 24, it was found that two taxa formerly treated under *Smilacina* Desfontaines required the following new combinations in *Maianthemum*, namely *M. fusciculiflorum* (Kawano) S. C. Chen & Kawano and *M. stenolobum* (Franchet) S. C. Chen & Kawano.

The genus *Maianthemum* (including *Smilacina*) consists of about 35 species and is widely distributed in the northern temperate zone as well as subtropical montane Asia and Central America. Two genera, *Smilacina* and *Maianthemum*, have been recognized traditionally and historically. LaFrankie (1986) concluded that the difference between them (trimerous vs. dimerous flowers) was not sufficient to warrant distinct genera, and therefore transferred the species of *Smilacina* to *Maianthemum*. Along with Li (1990) and Hara (1987), the present authors agree with LaFrankie's transfers and note that the following combinations are necessary for their forthcoming treatment of *Maianthemum* in the *Flora of China*, volume 24 (Chen & Kawano, in press).

Maianthemum fusciculiflorum (Kawano) S. C. Chen & Kawano, comb. nov. Basionym: *Smilacina fusciculiflora* Kawano, J. Jap. Bot. 41: 354. 1966. TYPE: Myanmar-China (Xizang). "Burma-Tibet Frontier: Adunq [sic = Adung] Valley, alt. 12000 ft," 26 June 1931, *F. Kingdon-Ward* 9706 (holotype, F).

This species occurs from 2200 to 3600 m in southeastern Xizang and northwestern Yunnan provinces of China, as well as in adjacent Myanmar. It has violet tepals free to the base of the perianth, whereas the closely related species *Maianthemum lichiangense* (W. W. Smith) LaFrankie and *M. tubiferum* (Batalin) LaFrankie have white or violet-tinged tepals connate at their bases to form a

tube. *Maianthemum lichiangense* occurs from 2800 to 3500 m in southern Gansu, Sichuan, northwestern Yunnan, and possibly Shaanxi provinces, and *M. tubiferum* occurs from 2500 to 3000 m in Gansu, Hubei, Qinghai, Shaanxi, and Sichuan provinces; both are endemic to China.

Maianthemum stenolobum (Franchet) S. C. Chen & Kawano, comb. nov. Basionym: *Tovaria stenoloba* Franchet, Bull. Soc. Bot. France 43: 47. 1896. *Smilacina stenoloba* (Franchet) Diels, Bot. Jahrb. Syst. 29: 247. 1900. *Smilacina paniculata* (Baker) F. T. Wang & Ts. Tang var. *stenoloba* (Franchet) F. T. Wang & Ts. Tang, Fl. Reipubl. Popularis Sin. 15: 32. 1978. *Smilacina tatsienensis* (Franchet) H. R. Wehrhahn f. *stenoloba* (Franchet) H. Hara, J. Fac. Sci. Univ. Tokyo, Sect. 3, Bot. 14: 155. 1987. *Smilacina tatsienensis* var. *stenoloba* (Franchet) D. M. Liu, in J. M. Xu, Fl. Sichuan. 7: 202. 1991. *Maianthemum tatsienense* (Franchet) LaFrankie var. *stenolobum* (Franchet) H. Li, in Z. Y. Wu et al., Fl. Yunnan. 7: 744. 1997. TYPE: China. Chongqing: "près de Tchen kéou tin [Chengkou]," *Farges* 593 bis (holotype, P).

This species is endemic to China, occurring from 2000 to 3000 m in southern Gansu, western Hubei, and Chongqing (formerly eastern Sichuan) provinces. It has narrowly lanceolate, 5–7-mm-long inner tepals, whereas the closely related species, *Maianthemum gongshanense* (S. Yun Liang) H. Li and *M. trifolium* (L.) Sloboda, have obovate or oblong, 2–4.5-mm-long inner tepals. *Maianthemum gongshanense* occurs from 3400 to 3600 m in western Yunnan Province, where it is endemic, and *M. trifolium* occurs from 400 to 700 m in Heilongjiang, Jilin, and possibly Nei Mongol provinces of China, as well as northern Korea, Russia, and North America.

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Literature Cited

- Chen, S. C. & S. Kawano. In press. *Maianthemum* F. H. Wiggers. In: Z. Y. Wu & P. H. Raven (editors), Flora of China, 24. Science Press, Beijing, and Missouri Botanical Garden Press, St. Louis.
- Hara, H. 1987. Notes towards a revision of the Asiatic species of the genus *Smilacina*. J. Fac. Sci. Univ. Tokyo, Sect. 3, Bot. 14: 137–159.
- LaFrankie, J. V., Jr. 1986. Transfer of the species of *Smilacina* to *Maianthemum* (Liliaceae). Taxon 35: 584–589.
- Li, H. 1990. Infrageneric system of the genus *Maianthemum*. Acta Bot. Yunnan., Suppl. 3: 1–12.